AMENDMENTS TO THE CLAIMS

Please enter the following amendments without prejudice or disclaimer.

Please cancel claims 3, 17, 19, 21 and 26 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently amended): A method for generating a *Drosophila* clipped *FRT* (cFRT) chromosome insensitive to a *P* transposase but remaining ~~functional~~ sensitive to a yeast site-specific flippase recombinase (FLP), comprising steps of:

(a) causing a local and imprecise transposition by exposing a *FRT* chromosome to said *P* transposase ~~for occurring a local and imprecise transposition~~, wherein said *FRT* chromosome contains a *P*[*FRT*] insertion with a selection marker gene;

(b) screening said *P[FRT]* insertion ~~insensitive to said *P* transposase~~ for an immobility of said selection marker gene to obtain screened products;

(c) selecting candidate products from said screened products by ~~further examinations~~ the steps of:

(c1) examining said screened products for both recombination capability and homozygous viability; and

(c2) examining recombination accessibility of FRT sequences contained in a clipped *P[FRT]* insertion by the presence of said FLP to obtain said candidate products; and

(d) exposing said candidate products [[~~by~~]] to said *P* transposase and selecting a desired product by said ~~further examinations~~ examining processes of steps (c1) and (c2) to obtain said *Drosophila* clipped *FRT* (cFRT) chromosome [[~~is~~]] insensitive to said *P* transposase but remaining ~~functional~~ sensitive to yeast site-specific flippase recombinase.

Claim 2 (Currently amended): The method according to claim 1, wherein said method further comprises [[a]] step (e) [[of]] examining the ~~actual~~ molecular nature of [[said]] a clipped insertion of said *Drosophila* cFRT chromosome by PCR (polymerase chain reaction).

Claim 3 (Canceled)

Claim 4 (Currently amended): The method according to claim [[3]] 1, wherein said recombination capability of step (c1) represents the functional activity of said clipped *P[FRT]* insertion and its homologous location relative to that of said original *P[FRT]* insertion.

Claim 5 (Currently amended): The method according to claim [[3]] 1, wherein said homozygous viability of step (c1) represents a genetic background after said *FRT* chromosome's exposure to said *P* transposase.

Claim 6 (Currently amended): The method according to claim 1, wherein said step (d) [[of]] exposing said candidate products ~~by said *P* transposase~~ and selecting said desired product ~~by said further examinations~~ is repeated at least twice.

Claim 7 (Original): The method according to claim 1, wherein said *Drosophila* cFRT chromosome is an isogenized homozygous viable *Drosophila* second chromosome.

Claim 8 (Currently amended): The method according to claim 1, wherein said cFRT is ~~formed due to a target sequence, recognized by said *P* transposase and responsible for a *P* transposase transposition, which is damaged and alternated into a type of~~ generated through damage and alteration of a target sequence to an incomplete target sequence, through one sequence of [[a]] the group consisting of:

(1) a sequence that is missing of a P5' DNA sequence region;

(2) a sequence that is missing of a P3' DNA sequence region; and

(3) a sequence that is missing of DNA sequences other than those defined in item (1) and in item (2); and

wherein the target sequence is originally recognized by said *P* transposase and responsible for a *P* transposase transposition.

Claim 9 (Currently amended): The method according to claim 1, wherein said *Drosophila* cFRT chromosome ~~remains~~ retains the ~~functional~~ activity ~~of said cFRT insertion~~ for a site-specific recombination in the presence of said FLP.

Claim 10 (Currently amended): The method according to claim 1, wherein ~~an effectiveness~~ sensitivity to a yeast site-specific flippase recombinase (FLP) of said *Drosophila* cFRT chromosome is monitored by a FLP-FRT system ~~and derived modification systems thereof~~.

Claim 11 (Currently amended): The method according to claim 1, wherein ~~an effectiveness~~ sensitivity to a yeast site-specific flippase recombinase (FLP) of said cFRT chromosome is monitored through monitoring a DNA configuration of said cFRT chromosome by molecular biology methods ~~for the description of said cFRT DNA sequences configuration~~.

Claim 12 (Currently amended): The method according to claim 1, wherein said *Drosophila* cFRT chromosome ~~remains~~ retains the functions of ~~to behave normally as~~ a wild type chromosome ~~feasible~~ for ~~various~~ genetic manipulations.

Claim 13 (Currently amended): The method according to claim 1, wherein a clipped *P[FRT]* insertion is alternatively moved to another chromosome from said *Drosophila* clipped *FRT* (cFRT) chromosome by treating said *Drosophila* cFRT chromosome with ~~one of~~ mutagens [[~~and~~]] or X-ray.

Claim 14 (Currently amended): The method according to claim 1, wherein said *Drosophila* cFRT chromosome is ~~alternatively~~ used to establish a *Drosophila* cell line based on a genetic background of said *Drosophila* cFRT chromosome.

Claim 15 (Currently amended): The method according to claim 1, wherein said *Drosophila* cFRT chromosome is mutated to obtain gene mutations ~~for further experiment~~.

Claim 16 (Currently amended): The method according to claim 15, wherein [[a]] molecular information of said gene mutations is recovered by retrieving flanking DNA sequences of a clipped *P[FRT]* insertion ~~with a molecular biology method~~.

Claim 17 (Canceled)

Claim 18 (Original): The method according to claim 16, wherein said molecular information ~~of said gene mutations can be~~ is recovered by a ~~related~~ bioinformatic manipulation.

Claim 19 (Canceled)

Claim 20 (Currently amended): The method according to claim 15, wherein the functional description of said gene mutations are ~~further~~ analyzed ~~based on the information obtained from said molecular biology method and said related bioinformatic manipulation~~ by using a biological technique.

Claim 21 (Canceled)

Claim 22 (Currently amended): A method for generating a *Drosophila* clipped FRT^{2L2R} ($cFRT^{2L2R}$) chromosome insensitive to a *P* transposase but remaining ~~functional~~ sensitive to a yeast site-specific flippase recombinase (FLP), comprising steps of:

(a) causing a local and imprecise transposition by exposing a double-*FRT* chromosome to said *P* transposase ~~for occurring a local and imprecise transposition~~, wherein said double-*FRT* chromosome contains a first *P[FRT]* insertion with a first selection marker gene on one arm thereof and a second *P[FRT]* insertion with a second selection marker gene on the other arm thereof;

(b) screening respectively said first *P[FRT]* insertion and said second *P[FRT]* insertion ~~insensitive to said *P* transposase~~ for an immobility of said selection marker genes to obtain screened products;

(c) selecting candidate products from said screened products by ~~further examinations~~ the steps of:

(c1) examining said screened products for both recombination capability and homozygous viability; and

(c2) examining recombination accessibility of FRT sequences contained in said *P[FRT]* insertion by the presence of said FLP to obtain said candidate products; and

(d) exposing said candidate products by said *P* transposase and selecting a desired product by said ~~further examinations~~ examining processes of steps (c1) and (c2) to obtain said *Drosophila* clipped FRT^{2L2R} ($cFRT^{2L2R}$) chromosome insensitive to said *P* transposase but remaining ~~functional~~ sensitive to yeast site-specific flippase recombinase.

Claim 23 (Currently amended): The method according to claim 22, wherein said method further comprises [[~~a~~]] step (e) [[~~of~~]] examining the ~~actual~~ molecular nature of [[~~said~~]] clipped insertions of said *Drosophila* cFRT chromosome by PCR.

Claim 24 (Currently amended): The method according to claim 22, wherein said step (b) further comprises the steps of:

(b1) screening said first *P[FRT]* insertion ~~insensitive to said *P* transposase subject to~~ for an immobility of said first selection marker gene; and

(b2) screening said second *P[FRT]* insertion ~~insensitive to said *P* transposase~~ from said screened products of step (b1) ~~subject to~~ for an immobility of said second selection marker gene.

Claim 25 (Currently amended): The method according to claim 22, wherein said step (b) further comprises the steps of:

(b1') screening said second *P[FRT]* insertion ~~insensitive to said *P* transposase subject to~~ for an immobility of said second selection marker gene; and

(b2') screening said first *P[FRT]* insertion ~~insensitive to said *P* transposase~~ from screened products of step (b1') ~~subject to~~ for an immobility of said first selection marker gene.

Claim 26 (Canceled)

Claim 27 (Original): The method according to claim 22, wherein said first selection marker is different from said second selection marker.

Claim 28 (Currently amended): The method according to claim 22, wherein said *Drosophila* clipped FRT^{2L2R} chromosome is ~~alternatively~~ generated from two *Drosophila* clipped FRT (cFRT) chromosomes ($cFRT^{2L}$ and $cFRT^{2R}$ chromosomes) by a genetic recombination method.

Claim 29 (Withdrawn): A *Drosophila* clipped FRT (cFRT) chromosome, wherein said chromosome is insensitive to a *P* transposase but remains functional to a yeast site-specific flippase recombinase (FLP), comprising:

a *Drosophila* second chromosome main body; and

a clipped *P[FRT]* (cFRT) insertion immobilized by said *P* transposase.

Claim 30 (Withdrawn): The *Drosophila* cFRT chromosome according to claim 29, wherein said cFRT is formed due to a target sequence, recognized by said *P* transposase and responsible for a *P* transposase transposition, which is damaged and alternated into a type of incomplete target sequence, through one of a group consisting of:

(1) missing of a P5' DNA sequence region;

(2) missing of a P3' DNA sequence region; and

(3) missing of DNA sequences other than those defined in item (1) and in item (2).

Claim 31 (Withdrawn): A *Drosophila* clipped FRT^{2L2R} ($cFRT^{2L2R}$) chromosome, wherein said chromosome is insensitive to a *P* transposase but remains functional to a yeast site-specific flippase recombinase (FLP), comprising:

a *Drosophila* second chromosome main body; and

a clipped *P[FRT]* (cFRT) insertion on a right arm ($cFRT^{2R}$) of said *Drosophila* second chromosome and a clipped *P[FRT]* (cFRT) insertion on a left arm ($cFRT^{2L}$) of said *Drosophila* second chromosome, wherein both said $cFRT^{2R}$ and said $cFRT^{2L}$ are immobilized by said *P* transposase.

Claim 32 (Withdrawn): The *Drosophila* $cFRT^{2L2R}$ chromosome according to claim 31, wherein said *P[FRT]* insertions on a left arm is inserted into the 3'end of the base T at 240696 bp of the AE003781 clone with the P3' end facing the centromere before being clipped, and said *P[FRT]* insertion a right arm is inserted into the 3' end of the base T at 11497 bp of the AE003789 clone with the P5' end pointing toward the telomere before being clipped.

Claim 33 (Withdrawn): The *Drosophila* $cFRT^{2L2R}$ chromosome according to claim 31, wherein said $cFRT^{2L}$ is an imprecise excision caused by a removal of P5' region and most part of a selection marker gene thereon, wherein a fragment from bases 26 to around 2070 of FBtp0000348 locus is deleted.

Claim 34 (Withdrawn): The *Drosophila* $cFRT^{2L2R}$ chromosome according to claim 31, wherein said $cFRT^{2R}$ is an imprecise excision caused by a removal of most of the P5' region and one of the FRT DNA repeats, wherein a fragment from bases 10 to 2821 of FBtp0000268 locus is deleted.